

Amendments to the Claims

Please amend Claims 1, 8, 11, 14, 17 and 27. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (Currently amended) An electromagnetic radiation-absorbing particle comprising:
 - (a) a core; and
 - (b) a shell ~~, wherein the shell encapsulates~~ encapsulating the core;wherein the shell comprises a first conductive material selected from the group consisting of TiN, ZrN and HfN; and
wherein the core comprises a material having the refractive index different from the refractive index of the first conductive material, said material selected the group consisting of a second conductive material different from the first conductive material and having a negative real part of the dielectric constant in a predetermined spectral band and a refracting material.
2. (Original) The particle of claim 1 wherein said particle exhibits an absorption cross-section greater than 1 in a predetermined spectral band.
3. (Original) The particle of claim 1 wherein the particle is substantially spherical.
4. (Previously Presented) The particle of claim 3 wherein the particle has a diameter from about 0.1 nm to about 300 nm.
- 5 - 6. (Cancelled)
7. (Previously Presented) The particle of claim 1 wherein the second conductive material is selected from a group consisting of Ag, Al, Mg, Cu, Ni, Cr, TiN, ZrN, and HfN.

8. (Currently amended) The particle of claim 7 wherein the materials of the core and the shell are selected so that the particle exhibits a peak of absorption in a range of wavelengths from about 200 nm to about ~~[[750]]~~ 700 nm.
- 9 - 10. (Cancelled)
11. (Currently amended) The particle of claim ~~[[31]]~~ 1 wherein thickness of the shell and/or the size of the core are independently adjusted so that the particle exhibits a peak of absorption in a range of wavelengths from about 200 nm to about ~~[[750]]~~ 700 nm.
- 12 - 13. (Cancelled)
14. (Currently amended) A method of manufacturing a particle that absorbs electromagnetic radiation, comprising the step of encapsulating a core with a shell,
wherein the shell comprises a first conductive material selected from the group consisting of TiN, ZrN and HfN; and wherein the core comprises a material having the refractive index different from the refractive index of the first conductive material, said material selected from the group consisting of a second conductive material different from the first conductive material and having a negative real part of the dielectric constant in a predetermined spectral band and a refracting material.
15. (Previously Presented) The method of claim 14 wherein the first and the second conducting materials are selected so that the particle exhibits a peak of absorption in a desired spectral band.
16. (Previously Presented) The method of claim 14 wherein the core comprises a refracting material, and wherein the thickness of the shell and/or the size of the core are independently adjusted so that the particles exhibit a peak of absorption in a desired spectral band.

17. (Currently amended) An electromagnetic radiation-absorptive material for substantially blocking passage of a selected spectral band of radiation comprising:
- (a) a carrier material; and
 - (b) a particulate material dispersed in the carrier material with a primary particle comprising
 - a core; and
 - a shell, encapsulating said core, and wherein the shell comprises a first conductive material selected from the group consisting of TiN, ZrN and HfN; and wherein the core comprises a material having the refractive index different from the refractive index of the first conductive material, said material selected from the group consisting of a second conductive material different from the first conductive material and having a negative real part of the dielectric constant in a predetermined spectral band, and a refracting material.
18. (Original) The material of claim 17 wherein the carrier is selected from the group consisting of glass, polyethylene, polypropylene, polymethylmethacrylate, polystyrene, polyethylene terephthalate, and copolymers thereof.
19. (Original) The material of claim 17 further comprising one or more distinct particulate materials.
20. (Previously Presented) The material of claim 17 wherein the material is selected from the group consisting of ink, paint, lotion, gel, film and solid.
- 21 - 26. (Cancelled)
27. (Currently amended) The material of claim 17 wherein the material is a textile, textile-like, or a foam matrix selected from a group consisting of gauze, rayon, polyester, polyurethane, polyolefin, cellulose and its derivatives, cotton, ~~orlon~~ acrylic copolymers (Orlon®), ~~nylon~~ polyamides (Nylon®), and hydrogel polymeric materials.

28. (Original) The material of claim 27 wherein the material is attached to a self-adhering elastomeric bandage.
29. (Original) The material of claim 17 wherein the primary particles are further embedded in beads.
30. (Original) The material of claim 29 wherein the primary particles are individually embedded in substantially spherical beads.
31. (Previously presented) The particle of Claim 1 wherein the core comprises a refractive material selected from a group consisting of Si, TiO₂, ZnO₂ and Al₂O₃.